NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Inactive Hazardous Waste Disposal Report

Site Code	915055				
Site Name	Tonawanda Coke	**Address**	3875 RIVER ROAD		
Classification	02	**City**	Tonawanda	**Zip**	14150
Region	9	**County**	Erie	**Town**	Tonawanda
Latitude	42 degrees, 58 minutes, 55.76 seconds			**Estimated Size**	160.0000
Longitude	-78 degrees, 55 minutes, 34.16 seconds				
Site Type	Dump, Landfill				

Site Description

Location: The site is located in the Town of Tonawanda, Erie County east of the Niagara River, approximately 0.5 miles south of I-190. The main plant property is located at 3875 River Road, Tonawanda, NY. The site is approximately 160 acres in size.

Site Features: The site is divided by River Road, with the main plant facility located to the east and a parcel adjacent to the Niagara River to the west. The main plant facility contains the coke ovens, supporting structures, and numerous coal/coke piles.

The western parcel is adjacent to the Niagara River, and contains a pump station, an abandoned conveyor system, a former aboveground tank farm, and other unused industrial structures. This western portion of the site is not currently used for coke production and has become overgrown with shrubs and trees. A drainage ditch traverse the western parcel and discharges to a small embayment of the Niagara River.

Several other listed hazardous waste disposal sites are nearby the site. Allied Chemical – Special Chemical Division (#915003) is located to the south, Roblin Steel (#915056) is located to the west and north, and the River Road (#915031) and Cherry Farm (#915063) sites are located to the northwest of the site along River Road. The Erie County Water Authority Van de Water Treatment Plant is immediately south of the site along the Niagara River . The Huntley Generation Station's fly ash landfill is immediately north of the plant portion of the site.

Current Zoning: The site is currently zoned and operated for industrial use. The surrounding parcels are currently used for a combination of commercial/industrial operations, utility right-of-ways, and public water utilities. The nearest residential area is located approximately 0.25 miles south of the site.

Historical Use: The Semet-Solvay Company, a subsidiary of Allied Chemical and Dye Corporation, began coke manufacturing operations at the site in 1917. In addition to producing coke, light oil distillation, ammonia recovery, and benzene, toluene, and xylene extraction were also conducted at the site. In 1978 the site was bought by Tonawanda Coke Corporation, who continues to operate the site as a coke manufacturing facility.

The first investigation at the site was completed by the NYSDEC in 1981, with follow-up investigations completed by the United States Geological Survey (USGS) in 1982 and 1983. Since these investigations several investigations have been conducted by Tonawanda Coke Corporation under NYSDEC oversight. These investigations indicated widespread on-site contamination resulting from the disposal of industrial and hazardous wastes at the site. The type of wastes vary by location, but in general include coke/cinders, building debris, coal tar sludge, scrap metal, wood, and saddle packing. Three historical disposal areas have been identified and are referred to as Site 108, Site 109, and Site 110.

Operable Units: The site has been divided into three operable units to facilitate remediation. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

OU1 (Site 110) is located in the northeast corner of the plant portion of the site. Materials such as coal tar sludge, wood

shavings impregnated with iron oxide, fly ash, and cinders were reportedly disposed at OU1. The disposal activities are reported to have occurred prior to 1978. In March 2008 it was determined that OU1 does not present a current or potential threat to public health or the environment, and a no further action Record of Decision (ROD) was issued. The ROD requires that Tonawanda Coke restrict access to OU1 and that an environmental easement be filed to control the future use of the area. This easement has not yet been executed.

OU2 (Site 109) is located near River Road on the western side of the plant portion of the site. In 1977, an unknown quantity of brick, rubble, and related demolition waste was disposed in. In March 2008 it was determined that OU2 does not present a current or potential threat to public health or the environment, and a no further action ROD was issued. The ROD requires that Tonawanda Coke restrict access to OU2 and that an environmental easement be filed to control the future use of the area. This easement has not yet been executed.

OU3 (Site 108) comprises the western parcel of the site adjacent to the Niagara River, and was used for transferring coal from the river to the plant facility via conveyor belts. In 1973 the Erie County Health Department granted Allied Chemical permission to establish a disposal area, which was subsequently filled with refuse, wood, scrap polyethylene and ceramic saddle packing from refining equipment. The disposal of coke/coal, fly-ash cinders, and coal tar sludge has also been documented. Additional investigation was conducted at OU3 in September 2016 to support the development of a final Feasibility Study.

Site Geology and Hydrology: The site generally slopes gently to the west towards the Niagara River. Surface water within the plant area is collected by a storm water collection system and directed to the SPDES permitted outfall west of the site. This outfall flows through the ditch that traverse OU3 (Site 108). Fill material is present as the uppermost stratigraphic unit over the entire site, fill thickness varying from approximately 1 to 10 feet. The fill encountered during the investigation consisted mainly of silt, gravel, cinders, slag, coke, and demolition debris. Underlying the fill material is a native glaciolacustrine deposits of clay and sand. This unit is composed primarily of red-brown to gray clay, with some silt and gravel lenses. The thickness of this unit has not been documented. Data from other investigations conducted at adjacent sites indicate that the clay stratum averages more than 50 feet in thickness.

The fill strata contain the uppermost water-bearing unit. This unit is not continuous in depth due to the varying thickness of the fill material across the site. The underlying clay strata act as a significant barrier to both horizontal and vertical groundwater movement. Bedrock is expected to be at least 50 feet below grade. Based on regional hydrogeology the upper bedrock is expected to be water bearing.

Materials Disposed at Site

OU 01

COAL TAR WASTES INCLUDING PAHS	UNKNOWN
organic solvents	UNKNOWN
CYANIDE	UNKNOWN
heavy metals	UNKNOWN
PHENOLS	UNKNOWN
benzene	UNKNOWN

OU 02

benzene	UNKNOWN
cyanides(soluble cyanide salts)	UNKNOWN
benzo(a)pyrene	UNKNOWN
chrysene	UNKNOWN

OU 03

benzo(a)pyrene	UNKNOWN
benzo(a)anthracene	UNKNOWN
benzo(b)fluoranthene	UNKNOWN
dibenz[a,h]anthracene	UNKNOWN
indeno(1,2,3-CD)pyrene	UNKNOWN
naphthalene	UNKNOWN
phenanthrene	UNKNOWN
pyrene	UNKNOWN

Analytical Data Available for :	Groundwater, Surface Water, Soil, Sediment
Applicable Standards Exceeded for:	Groundwater, Soil, Sediment